Journal of Forensic and Legal Medicine 20 (2013) 308–311

Contents lists available at SciVerse ScienceDirect

Journal of Forensic and Legal Medicine

journal homepage: www.elsevier.com/locate/jflm

Dying in the arms of Dutch governmental authorities

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ARTICLE INFO

Article history:
Received 24 April 2012
Received in revised form
30 July 2012
Accepted 7 September 2012
Available online 10 October 2012

Keywords:
Postmortem
Death in detention
Governmental authority
Cause of death
ECHR

ABSTRACT

Thorough investigation of deaths related to police actions or of persons placed under the 'care' of governmental authorities is anchored in the legal systems of every democratic system. The quality of this investigation should be guarded by an adequate set of control measures. Recently the Dutch Ombudsman published a report about this issue In the Netherlands no central registry of these deaths exists. The estimates based on the available data number some 400–500 deaths in custody in the past 10 years in the Netherlands of which only in 193 cases a legal postmortem was performed. We present an overview of these cases and discuss the present Dutch practice in the perspective of national and international legislation.

1. Introduction

'You can die anywhere, but not in prison', is the golden rule for everyone who takes care of prisoners. The European Court of Human Rights (ECHR) stresses that Contracting States have the obligation to protect the lives of prisoners. In order to protect the health and physical well-being adequate medical care should, among other things, be given to prisoners. Special attention should be given to prisoners suffering from mental illness or addiction.[1]

Preventing a prisoner from dying is the aim, but the result is never certain. The ECHR states that when a prisoner dies, the governmental institution is obliged to perform a thorough, effective official investigation of the incident.[2] The burden of proof for giving a satisfactory and convincing explanation for the death of the detainee rests on the state.[3] The ECHR stresses that in cases where the prisoner dies as a result of a health problem, the state is obliged to give an explanation as to the cause of death and the treatment administered to the person concerned prior to his or her death.[4]

Natural deaths in prison do not get much attention. In contrast, lethal incidents during police actions often receive major attention from the public as well as from the media and may even lead to social disturbances and political discussions. The ECHR stresses that the investigation after the use of police force should be carried out by and under the responsibility of an independent organization.[5] Independence means not only a lack of hierarchical or institutional connection between the investigating authority and the authority responsible for the well being of the prisoner, it also means that a practical independence has to be present.[6] The investigation must also be effective in the sense that it is capable of leading to a determination of whether the force used in such cases was or was not justified under the circumstances.[7] The investigation should be capable of leading to the identification and punishment of those responsible.[8] This is not an obligation of result, but of means. The ECHR stresses the importance of medico legal examination, including, where appropriate, an autopsy, into the cause of death.[9]

Under the Dutch legal system the cause of death is determined either by means of an external medical examination or by postmortem. In cases of unknown or suspicious death the district attorney (DA) can decide to have a forensic postmortem performed (art. 76 Burial and cremation act, Wet op de lijkbezorging). Thus

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http://dx.doi.org/10.1016/j.jflm.2012.09.024

Table 1
Causes of death.

Natural COD	N	%	Unnatural COD	N	%
AMI	15	19.5	Intoxication	46	39.3
Acute cardiac non-AMI	8	10.4	Strangulation	25	21.4
Chronic heart disease	1	1.3	Shot wounds	22	18.8
Acute long infection	9	11.7	Positional asphyxiation	8	6.8
CPD	9	11.7	Other	13	11.1
Unknown COD	21	27.3	Unknown COD	3	2.6
Other	14	18.2			
Total	**77**		**Total**	**117**	

COD = cause of death; AMI = acute myocardial infarction; CPD = chronic pulmonary disease.

under the Dutch law not all deaths in custody are examined through a (forensic) postmortem.

If no postmortem is performed, the DA accepts that the cause of death is only based on the external medical examination. After the DA has decided not to perform a (forensic) postmortem, the relatives of the diseased can decide to have a (clinical) postmortem performed (art. 72).

In the Netherlands no central registry of deaths during police actions or deaths in custody exists. It is therefore not possible to adequately control the quality of police measures or care (e.g. medical care) in state detention facilities in the Netherlands.

The Dutch Forensic Institute (Nederlands Forensisch Instituut, NFI) performs and thus collects the data of all forensic postmortems. We present a review of postmortem cases in which police or other governmental authorities were involved in the death of the prisoner or in which the diseased remained in an institution under governmental authority at the time of death. In this study we aimed to get an overview of the numbers of specific cases in which the cause of death was determined by a forensic autopsy. The results are compared to the available general data on deaths during police actions and in detention in the Netherlands. We shall discuss the results in the perspective of developments within the medical care in Dutch detention facilities and the jurisprudence of the ECHR.

2. Materials and methods

We collected all postmortem cases of deaths occurring during police actions and in detention from the files of the NFI during the period of 2000–2009. Police action was defined as every action performed by the police with the purpose of taking a civilian into custody, making a civilian stop for a (traffic) control or remaining or restoring order. Detention was defined as detention in a police station, a prison or state detention facilities other than state prisons (e.g. detention facilities for body packers).

In all cases a full postmortem was performed, as is done in all forensic postmortems. In all cases in which no evident cause of death (COD) was found at postmortem an extensive toxicological testing had been performed. Evident COD was defined as a finding, which in itself is absolutely lethal.

The cases were divided in natural COD and unnatural COD.

A natural COD was defined as death caused by a lethal disease. An unnatural COD was defined as deaths, which were not natural, e.g. death caused by lethal injuries (shooting, stabbing, battering), inflicted asphyxiation (suffocation by external force) and intoxications (overdose of drugs or medication and death caused by agitated delirium due to drugs).

Information about the manner of death (MOD) and the location of the fatal incident was received from judicial institutions like detention centers, police stations, juvenile penitentiary centers, penitentiary medical care facilities and penitentiary psychiatric centers.

No forensic postmortems of persons who died shortly after release from e.g. detention have been requested and were therefore not performed at the NFI during the studied period. It is unknown whether deaths shortly after release from the police station occurred in the studied period.

Table 2
Known natural COD in custody versus police action.

Known COD	Prison & police custody	Police action
Heart acute	16 (37.2%)	7 (53.8%)
Heart chronic		1 (7.7%)
Acute long infection	8 (18.5%)	1 (7.7%)
CPD	7 (16.3%)	2 (15.4%)
Other	12 (27.9%)	2 (15.4%)

COD = cause of death; CPD = chronic pulmonary disease.

Table 3
Known unnatural COD in custody versus police action.

Known COD	Prison & police custody	Police action
Intoxication	22 (39.3%)	24 (41.4%)
Strangulation	24 (42.9%)	1 (1.7%)
Shot wounds		22 (37.9%)
Positional asphyxiation	1 (1.8%)	7 (12.1%)
Other	9 (16.1%)	4 (6.9%)

COD = cause of death.

3. Results

During the studied period a total of 5654 forensic postmortems were performed in the NFI. From these 194 cases (3.4%) matched the criteria of the study and were included. Of these 194 cases 77 died of a natural COD and 117 of an unnatural COD (Table 1). The causes of death are summarized in Table 1. In Tables 2 and 3 a subdivision has been made for the cause of death in a police station and in prison. In Table 4 the manner of death is summarized.

3.1. Natural causes of death (Tables 1 and 2)

Twenty-four persons died of a cardiac condition and all but one suffered an acute onset. In 14 cases a dysrhythmia due to morphologic cardiac changes was concluded based on histomorphologic changes of the myocardium such as myocarditis, arrhythmogenic right ventricular dysplasia or small vessel disease of the heart, in combination with exclusion of other pathology.

A pulmonary problem was the COD in 21 cases. In 21 cases no COD was found. Eleven persons in the group 'other COD' died of various causes such as brain pathology or vascular disease other than coronary disease.

3.2. Unnatural causes of death (Tables 1 and 3)

Approximately two thirds of the 117 unnatural deaths were due to intoxication (17 in police cells, 14 in public spaces, 15 in prisons or detention centers). Seven of these cases were body packers.

Table 4
'Manner of death' in the group of unnatural COD.

Manner of death	N	%
Accidental intoxication	42	37.1
Death by a third party	38	32.8
Suicide	29	25.0
Death by a third party/accidental intoxication	4	3.5
Undetermined	3	2.6
Total	**116**	

In the group of 22 shooting incidents 19 persons were shot by the police and 3 committed suicide during attempted arrest.

The group 'other' consists of various causes of death, e.g. traffic accident injuries in a police car, drowning during police pursuit or death due to injuries sustained prior to the apprehension.

The most frequent MOD was non-intentional intoxication consisting of 20 drug users, 9 body packers and 13 persons with an agitated delirium.

In the group of killings by others 19 persons were shot by the police, 8 died of positional asphyxiation caused by a control hold, 3 died of injuries sustained during police chase and 1 in a police car crash.

In the group of 29 suicide cases 25 were hangings, 3 died of gunshot wounds and 1 of cut wounds.

Among the 13 'other' cases were 4 cases the MOD could have been either killing by others or non-intentional intoxication, because these persons died of positional asphyxiation, intoxication or a combination of the two. In 3 cases the MOD could not be determined due to absent or incomplete of information.

Of the 117 unnatural causes of death 47 occurred in state prisons or detention centers (40%), 23 persons (20%) died at a police station and 47 persons (40%) died during police arrest actions.

In the view of possible death prevention during detention, either in prison or in a police cell, the COD was additionally distributed according to the occurrence in detention and during police action.

In the natural COD acute cardiac death occurred more frequently during police action compared to detention. Death due to acute pulmonary infection was twice as frequent in detention compared to police actions.

In the group of unnatural COD strangulation (suicidal hanging) occurred in custody, whereas the one case during police action was caused by a throat hold. Death due to shot wounds occurred exclusively during police action. Almost all positional asphyxiations occurred during police actions, one person died due to restriction measures after being placed in a police cell.

4. Discussion

Approximately 135,000 persons (circa 8‰) die each year in the Netherlands.[10] Approximately 40–50 persons (circa 3‰ of 13,000 persons imprisoned) die yearly in *Dutch prisons*.[11] This 3‰ seems to be a favorable number. However, because males between 20 and 40 years of age are largely overrepresented in prisons the chance of dying young in prison is judged substantial by the authorities themselves.[12]

No exact numbers of persons dying during *police actions and in police cells* during the 160,00 to 200,000 arrests in the Netherlands per year exist.[13] The number was estimated at 5.9 persons every year in the period 1983–1993[14] and 7.4 every year in 2000–2004[15] respectively. The studies, however, are not quite comparable because different inclusion criteria were used.

The deaths in *other detention facilities* than prisons in the Netherlands are not registered at all.

These numbers show that in the Netherlands at least 50–60 persons die yearly while involved with or cared for by penitentiary governmental institutions. The number of persons dying during their stay in governmental institutions overall (penitentiary, mental en juvenile) are much higher.

Over the past 10 years more than 400–500 of the deaths in penitentiary institutions occurred while in only 193 (less than 40%) a legal postmortem was performed. In about 300 cases no legal postmortem was performed. It is unknown in how many cases a postmortem was performed after a request of the family. We presume that because of the big political impact all deaths during police actions have a postmortem. This would be the correct procedure, but there are no means to check this. Apparently in over 50 per cent of all deaths in a penitentiary governmental institution[16] the authorities rely on information from the death scene and external medical examination.

The importance of a postmortem is shown by comparison of the ante-mortem and post-mortem diagnosis. This was addressed in a number of studies in a clinical setting (Table 5). These studies show that in one of three cases the ante- and post-mortem diagnoses were discrepant. In some 13 per cent the postmortem revealed pathology, which, if diagnosed and treated prior to death, would have led to a prolongation of the patients survival. These study populations consisted of patients who already have undergone diagnostic procedures, so many medical details were known already. On the other hand these were intensive care unit patients with multiple and complicated pathology. This limits the possibility to project the outcome of these studies to our study population. Interestingly, especially infections were missed in the clinical setting.[17] In our study acute pulmonary infections prevailed in deaths in custody over those during police action, whereas these are treatable conditions. We therefore believe that the risk of dying of infections in an out of clinic setting is substantial. Furthermore, Barendregt et al.[18] found that autopsies substantially contribute to the clarification of the cause of death especially in cases of sudden and unexpected deaths. Yalamarthi et al.[19] compared the outcome between the COD determined by external medical examination versus postmortem and found a difference of as much as 58 per cent.

Extrapolating these data to deaths in situations when governmental institutions are involved and the cause of death is not confirmed by autopsy the determined COD will be incorrect in up to 13–30 per cent. Especially cardiac and pulmonary pathology and intoxications will be missed. Considering this the question rises whether the Dutch authorities should perform a postmortem more often in cases of deaths under discussion or in cases of sudden death.

According to the Human Rights Council of the United Nations[20] and the ECHR, governmental institutions must provide accurate information concerning the cause of death to the relatives of detainees. Failing to do so is a violation of the relatives' rights.[21] Especially in deaths in custody where no obvious signs of violence exist, the death certificate is based on external examination only, which, as shown in the literature, is rather inaccurate.

Besides the above-mentioned obligations, a postmortem is the last chance to check on the accuracy of the diagnosis and treatment before the death. In other words a postmortem is one of the instruments of the quality control of medical care.

In the Netherlands the attention for medical care to prisoners was increased over the last ten years. The Dutch government performed two studies into the medical care in prisons in 1995 and 1999,[22] which led to the development and implementation of an

Table 5
Publications on correlation of ante- versus clinical post-mortem COD.

Study	Total different diagnoses (%)	Missed 'major' diagnosis (%)
Yalamarthi et al.[4] ($N = 70$)	42	9
O'Connor et al.[5] ($N = 59$)	49	7
Mort et al.[6] ($N = 163$)	42	23
Goldstein et al.[7] ($N = 157$)	12	6
Barendregt et al.[8] ($N = 312$)	21	14
Goldman et al.[9] ($N = 300$)	–	16
Landefeld et al.[10] ($N = 5919$[a])	35	16
Mean percentage	33.5	13

[a] Review article of different studies.

improvement program. In 2010 the Dutch parliament received another report addressing the results of the improvement program named "medical services in prisons: appropriate care, but not guaranteed".[23] This report states among others: 'the quality of care and the expertise level of the personnel must be improved'.

The jurisprudence of the ECHR urged the Dutch government to take measurements in investigating deaths in prison. In 2009 the government issued a directive concerning the investigation of the cause of death in prisons,[24] stating that the death certificate should preferably be issued by an independent doctor rather than by the attending prison's general practitioner. The possibility to carry out a postmortem is mentioned in the directive but no obligation to do so exists. Just following this directive might not in all meet the jurisprudence of the ECHR. Even when the issued directive is followed and every death in prison is (only) investigated by means of external investigation, the exact COD will not be found in a substantial number of especially non-violent deaths, whereas the ECHR stresses the importance of giving an explanation as to the cause of death in cases where a prisoner dies as a result of a health problem.

In our study group 40 per cent of the people dying in prison, died of a disease. In our opinion not performing a postmortem in a situation in which the cause of death is unknown, but appears to be natural, not only violates the international agreements but also interferes with the governmental efforts to improve medical care in e.g. prisons effectively.

We believe that an extensive death review by an independent team should be performed in all cases and that if this team cannot establish a certain COD a legal postmortem should take place. We further believe that a centralized registry of all deaths in which governmental institutions are involved should be installed. This registry would provide insight in the causes of death e.g. in prison and create the opportunity to improve medical care for prisoners.

Ethical approval
None.

Funding
None.

Author declaration

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

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Conflict of interest
None declared.

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